



SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 25-Mar-2024

Revision Number 2.05

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Benzenesulfonic Acid Monohydrate
Product Code	022-00822,026-00825

Supplier FUJIFILM Wako Pure Chemical Corporation

1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan

Phone: +81-6-6203-3741 Fax: +81-6-6203-2029

Emergency telephone number +81-6-6203-3741 / +81-3-3270-8571

Recommended uses For research use only

Restrictions on useSeek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Corrosive to metalsCategory 1Acute toxicity - OralCategory 4Skin corrosion/irritationCategory 1Serious eye damage/eye irritationCategory 1

Pictograms



Signal word

Danger

Hazard statements

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H302 - Harmful if swallowed

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- · Do not eat, drink or smoke when using this product
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wear protective gloves/protective clothing/eye protection/face protection
- Keep only in original container

Precautionary statements-(Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- · Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

- Rinse mouth
- Do NOT induce vomiting
- · Absorb spillage to prevent material damage

Precautionary statements-(Storage)

- Store locked up
- Store in corrosive resistant/ container with a resistant inner liner

Precautionary statements-(Disposal)

· Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula C6H5SO3H·H2O

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Benzenesulfonic Acid	98.0	176.19	N/A	N/A	26158-00-9
Monohydrate					

Note on ISHL No.: * in the table means announced chemical substances.

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Avoid contact with metal. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage

Safe storage conditions

Storage conditions Keep container protect from light, store

in well-ventilated place at room temperature (preferably cool). Keep container tightly

closed. Glass

Safe packaging material

Incompatible substances Strong oxidizing agents, Metals

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eve-wash facility. And display their position clearly.

Exposure limitsThis product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Personal protective equipment

Respiratory protection Dust mask (JIS T 8151)

Hand protection chemical protective gloves (JIS T 8116)

Eye protection protective eyeglasses or chemical safety goggles (JIS T 8147)

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Color White - pale brown

crystals - crystalline powder **Appearance**

no data available 43 - 44 °C Melting point/freezing point no data available Boiling point, initial boiling point and boiling range **Flammability** no data available **Evaporation rate:** no data available Flammability (solid, gas): no data available

Upper/lower flammability or explosive limits

no data available Upper: no data available Lower: Flash point no data available no data available **Auto-ignition temperature: Decomposition temperature:** no data available рΗ no data available Viscosity (coefficient of viscosity) no data available Dynamic viscosity no data available

Solubilities water or Ethanol: freely soluble. ether: insoluble.

n-Octanol/water partition coefficient:(log Pow) -2.25

Vapour pressure no data available

Specific Gravity / Relative density 1.273

no data available Vapour density **Particle characteristics** no data available

Section 10: STABILITY AND REACTIVITY

Stability

Odor

Reactivity no data available

May be altered by light. This material is deliquescent. **Chemical stability**

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight, Moisture

Incompatible materials

Strong oxidizing agents, Metals

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Sulfur oxides (SOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity no data available

Skin irritation/corrosion no data available Serious eye damage/ irritation no data available Respiratory or skin sensitization no data available Reproductive cell mutagenicity no data available no data available Carcinogenicity

Reproductive toxicity no data available STOT-single exposure no data available STOT-repeated exposure no data available no data available **Aspiration hazard**

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity no data available

Other data no data available

Persistence and degradability No information available No information available **Bioaccumulative potential** Mobility in soil No information available Hazard to the ozone layer No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number UN2585

Proper shipping name: Alkylsulphonic acids, solid

UN classfication

Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG

UN number UN2585

Proper shipping name: Alkylsulphonic acids, solid

UN classfication

Subsidiary hazard class

Packing group Ш

Marine pollutant (Sea) Not applicable

No information available Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

IATA

UN number UN2585

Proper shipping name: Arylsulphonic acids, solid

UN classfication

Subsidiary hazard class

Packing group

Environmentally Hazardous Not applicable

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act Not applicable **Poisonous and Deleterious** Not applicable **Substances Control Law**

Industrial Safety and Health Act Not applicable [2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)

Industrial Safety and Health Act (2024~)

Corrosive Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding

Regulations for the carriage

and storage of dangerous Transport by Ship and Storage, Attached Table 1)

Page 5/6

goods in ship

Civil Aeronautics Law Corrosive Substances (Ordinance Art.194, MITL Nortification for Air Transportation of

Explosives etc., Attached Table 1)

Pollutant Release and Transfer Not applicable

Register Law (2023.4.1-)

Export Trade Control Order Not applicable

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN)

http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations

RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS

Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

Record of SDS revisions

The following contents were revised. Regulatory information.

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet